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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

MMC2/1012

FUREMAN, J

ART UNIT

PAPER NUMBER

2876

DATE MAILED:

10/12/00

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/320,457

Applicant(s)
Ishii

Examiner
Jared Fureman

Group Art Unit
2876



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-6 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-6 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on May 27, 1999 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rotary encoder (see claim 3) must be shown or the feature(s) cancelled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, the phrase "for example" (see line 3) renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bridgelall et al (US 5,525,788).

Bridgelall et al teaches an optical symbol reading device comprising: an image data input section that is provided with an image data input unit (scanner 40) for receiving a bar code label (50) on an article (3010) that is moved by a conveyor, an image data input focus point modifier (within microprocessor 10), an article detector (article sensor 3100) for detecting that the article has entered a read zone, an interpreter for converting electric signals from the image data input section to numbers or characters, an interpretation result output section for outputting the interpretation results of the interpreter to an external device, a front surface position detector (belt speed indicator 3000) for detecting a position on the conveyor of

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Representative: Mr. Leon Radomsky (43,445)

a front surface of an article that is moved by the conveyor, an image data input focus point control section for outputting data from the front surface position detector to the image data input focus point modifier, the image data input focus point control section including means for converting front surface position data of the article that are received from the front surface position detector to a reading distance, which is the distance between the image data input unit and the front surface of the article, and outputting the reading distance as focus point data to the image data input focus point modifier, the image data input focus point modifier including means for matching the focus point to the front surface of the article that moves constantly over time by setting the focus point to a position designated by the focus point data that are received from the image data input focus point control section (see 1, 2, 4, 25, column 1 lines 28-45, column 4 lines 34-65, column 6 line 18 - column 7 line 9, column 7 line 54 - column 9 line 34, and column 20 lines 20-34).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall et al.

The teachings of Bridgelall et al have been discussed above. Bridgelall et al also teaches the front surface position detector including means for measuring a distance of movement of the conveyor (see figure 4 and column 9 lines 1-35).

Bridgelall et al fails to specifically teach means provided with a rotary encoder that is attached to the conveyor, for finding the position of the front surface of the article by counting pulses from the rotary encoder and measuring a distance of movement of the conveyor.

However, at the time of the invention it was well known to those of ordinary skill in the art to use a rotary encoder to find a position by counting pulses from the rotary encoder and measuring a distance of movement.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate, with the system as taught by Bridgelall et al, means provided with a rotary encoder that is attached to the conveyor, for finding the position of the front surface of the article by counting pulses from the rotary encoder and measuring a distance of movement of the conveyor, since it is an obvious variation in the means for measuring a distance of movement of the conveyor, well within the ordinary skill in the art at the time of the invention, that fails to produce any unexpected results.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall et al (US 5,525,788) in view of Nishimura et al (US 5,436,439).

The teachings of Bridgelall et al have been discussed above.

Bridgelall et al fails to specifically teach the front surface position detector including means that is provided with a light projection position detector and a light reception position detector made up of a plurality of transmissive multiple optical axis sensors, for finding the position of the front surface of the article by detecting which transmissive multiple optical axis sensors of the plurality of transmissive multiple optical axis sensors of the light projection position detector are being shielded by the article.

Nishimura et al teaches an optical symbol reading device including: a front surface position detector (article location detector 12) including means that is provided with a light projection position detector and a light reception position detector made up of a plurality of transmissive multiple optical axis sensors (light sources 34a-34k and light interceptors 35a-35k), for finding the position of the front surface of the article by detecting which transmissive multiple optical axis sensors of the plurality of transmissive multiple optical axis sensors of the light projection position detector are being shielded by the article (see figures 1-8, column 3 line 63 - column 4 line 35, column 5 line 62 - column 6 line 14).

In view of Nishimura et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system, as taught by Bridgelall et al, to include the front surface position detector including means that is provided with a light projection position detector and a light reception position detector made up of a plurality of transmissive multiple optical axis sensors, for finding the position of the front surface of the article by detecting which transmissive multiple optical axis sensors of the plurality of

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transmissive multiple optical axis sensors of the light projection position detector are being shielded by the article, since it is an art recognized functional equivalent to sensing the presence of the article and sensing the belt speed to determine the articles position (see column 5 line 62 - column 6 line 14), as taught by Bridgelall et al.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall et al in view of Jones (US 3,899,687).

The teachings of Bridgelall et al have been discussed above.

Bridgelall et al fails to teach means for reading two surfaces of an article moved by a conveyor by fixing a focus on a position of the side surface and reading the side surface when receiving a bar code label on the side surface of the article from the image data input unit.

Jones teaches an optical symbol reading device comprising: means for reading two surfaces (front side and back side) of an article (package 12) moved by a conveyor (14) by fixing a focus on a position of the side surface and reading the side surface when receiving a bar code label on the side surface of the article from an image data input unit (scanner 18) (see figure 1, column 2 lines 42-55, column 2 line 68 - column 3 line 9, and column 3 lines 39-51).

In view of Jones' teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate, with the system as taught by Bridgelall et al, means for reading two surfaces of an article moved by a conveyor by fixing a focus on a position of the side surface and reading the side surface when receiving a bar code label on the

side surface of the article from the image data input unit, in order to allow articles to be placed on the conveyor with less regard to the location or orientation of the surface carrying the bar code, thereby saving time and increasing efficiency.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Saporetti (US 6,000,618), Bjorner et al (US 5,912,447), Arackellian (US 5,616,909), Hippenmeyer et al (US 5,481,096), Malow et al (US 5,311,999), Gabeler (US 4,920,255), Cockrell (US 3,086,121) all teach optical symbol reading devices for reading an optical symbol on an article being moved by a conveyor.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jared Fureman** whose telephone number is (703) 305-0424. The examiner can normally be reached between the hours of 7:00AM to 4:30PM Monday thru Thursday and every other Friday (second Friday of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Donald T. Hajec, can be reached on (703) 308-4075. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [jared.fureman@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that

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Applicant(s): Ishii (235/462.01)

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sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



jjf
jjf

October 3, 2000

THIEN M. LE
PRIMARY EXAMINER